

Learning to Fly: The Wright Brother's Adventure			
1997 Mathematics			
Learning Standards			
Illinois Mathematics			
Grades 6-8			
Activity/Lesson	State	Standards	
Wright Brothers: 1900 Glider	IL	MA.6-8.7.A.3b	Apply the concepts and attributes of length, capacity, weight/mass, perimeter, area, volume, time, temperature and angle measures in practical situations.
Wright Brothers: 1900 Glider	IL	MA.6-8.9.D.3	Compute distances, lengths and measures of angles using proportions, the Pythagorean theorem and its converse.
Wright Brothers: 1901 Glider	IL	MA.6-8.7.A.3b	Apply the concepts and attributes of length, capacity, weight/mass, perimeter, area, volume, time, temperature and angle measures in practical situations.
Wright Brothers: 1902 Glider	IL	MA.6-8.7.A.3b	Apply the concepts and attributes of length, capacity, weight/mass, perimeter, area, volume, time, temperature and angle measures in practical situations.
Wright Brothers: 1902 Glider	IL	MA.6-8.7.B.3	Select and apply instruments including rulers and protractors and units of measure to the degree of accuracy required.
Wright Brothers: 1903 Flyer	IL	MA.6-8.7.A.3b	Apply the concepts and attributes of length, capacity, weight/mass, perimeter, area, volume, time, temperature and angle measures in practical situations.
1900: Kitty Hawks	IL	MA.6-8.9.A.3c	Use concepts of symmetry, congruency, similarity, scale, perspective, and angles to describe and analyze two- and three-dimensional shapes found in practical applications (e.g., geodesic domes, A-frame houses, basketball courts, inclined planes, art forms, blueprints).
1901: The First Improvement	IL	MA.6-8.7.A.3b	Apply the concepts and attributes of length, capacity, weight/mass, perimeter, area, volume, time, temperature and angle measures in practical situations.
New Data	IL	MA.6-8.7.A.3b	Apply the concepts and attributes of length, capacity, weight/mass, perimeter, area, volume, time, temperature and angle measures in practical situations.
1902: Success at Last	IL	MA.6-8.6.A.3	Represent fractions, decimals, percentages, exponents and scientific notation in equivalent forms.
1902: Success at Last	IL	MA.6-8.6.C.3a	Select computational procedures and solve problems with whole numbers, fractions, decimals, percents and proportions.

1902: Success at Last	IL	MA.6-8.6.C.3b	Show evidence that computational results using whole numbers, fractions, decimals, percents and proportions are correct and/or that estimates are reasonable.
1903: Powered Flight	IL	MA.6-8.7.A.3b	Apply the concepts and attributes of length, capacity, weight/mass, perimeter, area, volume, time, temperature and angle measures in practical situations.
1903: Powered Flight	IL	MA.6-8.9.D.3	Compute distances, lengths and measures of angles using proportions, the Pythagorean theorem and its converse.
1903: Powered Flight	IL	MA.6-8.10.A.3a	Construct, read and interpret tables, graphs (including circle graphs) and charts to organize and represent data.
<b>Learning to Fly: The Wright Brother's Adventure</b>			
<b>1997 Mathematics</b>			
<b>Learning Standards</b>			
<b>Illinois Mathematics</b>			
<b>Grades 9-10</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
1901: The First Improvement	IL	MA.9-10.7.C.4b	Interpret scale drawings and models using maps and blueprints.
New Data	IL	MA.9-10.7.B.4	Estimate and measure the magnitude and directions of physical quantities (e.g., velocity, force, slope) using rulers, protractors and other scientific instruments including timers, calculators and computers.
New Data	IL	MA.9-10.7.C.4a	Make indirect measurements, including heights and distances, using proportions (e.g., finding the height of a tower by its shadow).
New Data	IL	MA.9-10.8.D.4	Formulate and solve linear and quadratic equations and linear inequalities algebraically and investigate nonlinear inequalities using graphs, tables, calculators and computers.
1902: Success at Last	IL	MA.9-10.6.D.4	Solve problems involving recipes or mixtures, financial calculations and geometric similarity using ratios, proportions and percents.
1902: Success at Last	IL	MA.9-10.7.A.4a	Apply units and scales to describe and compare numerical data and physical objects.
1902: Success at Last	IL	MA.9-10.7.A.4b	Apply formulas in a wide variety of theoretical and practical real-world measurement applications involving perimeter, area, volume, angle, time, temperature, mass, speed, distance, density and monetary values.

1902: Success at Last	IL	MA.9-10.7.C.4a	Make indirect measurements, including heights and distances, using proportions (e.g., finding the height of a tower by its shadow).
1903: Powered Flight	IL	MA.9-10.7.A.4a	Apply units and scales to describe and compare numerical data and physical objects.
1903: Powered Flight	IL	MA.9-10.7.A.4b	Apply formulas in a wide variety of theoretical and practical real-world measurement applications involving perimeter, area, volume, angle, time, temperature, mass, speed, distance, density and monetary values.
1903: Powered Flight	IL	MA.9-10.7.B.4	Estimate and measure the magnitude and directions of physical quantities (e.g., velocity, force, slope) using rulers, protractors and other scientific instruments including timers, calculators and computers.
1903: Powered Flight	IL	MA.9-10.7.C.4a	Make indirect measurements, including heights and distances, using proportions (e.g., finding the height of a tower by its shadow).
1903: Powered Flight	IL	MA.9-10.8.B.4a	Represent algebraic concepts with physical materials, words, diagrams, tables, graphs, equations and inequalities and use appropriate technology.
1903: Powered Flight	IL	MA.9-10.8.D.4	Formulate and solve linear and quadratic equations and linear inequalities algebraically and investigate nonlinear inequalities using graphs, tables, calculators and computers.
1903: Powered Flight	IL	MA.9-10.10.A.4a	Represent and organize data by creating lists, charts, tables, frequency distributions, graphs, scatterplots and box-plots.